PAPER and PULP INDEXES

1935 - 1934

(Monthly Average 1934 = 100)

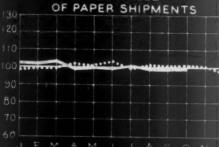
PAPER IMPORTS



PAPER PRODUCTION



UNIT VALUE



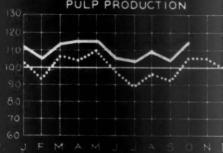
MONTHLY EARNINGS



PULP IMPORTS



PULP PRODUCTION

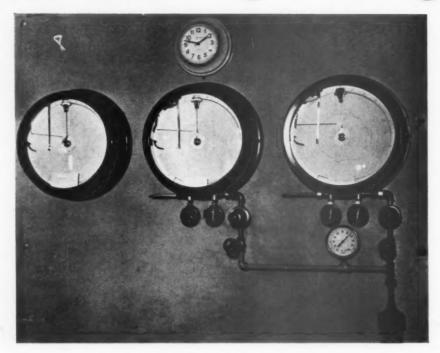


OCTOBER, 1935

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ICITIC-PULP&PAPER-INDUSTRY

Controlled Pulp Cooking



on the Pacific Coast

Again it's "Foxboro Control" for a new, modern unit in Pacific pulp-making! The "Chemipulp" system recently placed in operation in record time at the Puget Sound Pulp & Timber Company's Bellingham mill, is controlled by the Foxboro Controllers shown in the photo above.

The instrument at the left records the liquid level in the Acid Accumulator—that in the middle automatically controls the pressure in the Accumulator—and the temperature of the acid is held uniform automatically by the Stabilog Controller at the right. Combined they help to assure high-quality, uniform pulp.

Both big and small mills find that they can create genuine savings with Foxboro Instruments and controls. For example:

In Paper Making-

Foxboro offers a complete system for automatically controlling moisture and other characteristics of the sheet.

In Mechanical Pulp-

Foxboro automatic Grinder Temperature Control assures more uniform quality of ground wood.

Why not call in a Foxboro Engineer to co-operate with you? Descriptive Bulletins on Request.

T. A. P. P. I. Member

THE FOXBORO COMPANY

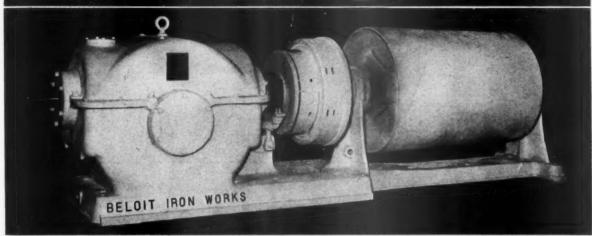
110 Neponset Ave., Foxboro, Mass., U.S. A



Pacific Coast Branches: Portland, Oregon, 302 Lewis Bldg.; Los Angeles, 2307 E. Eighth St.; San Francisco, 461 Market St.

Affiliate: The Atlantic Precision Instrument Company, Makers of "The Verigraph" for Control of Paper Drying.

BELOIT



HEAVY-DUTY HYPOID GEAR DRIVE

Equipped with Beloit Patented Magnetic clutch-simple-easily adjusted by ordinary mechanic. No need for electrician. Gears are cut of special steel totally enclosed operating in bath of oil. Gear and pinion shafts mounted in roller bearings. Beloit patented micarta flexible couplings used to connect drive to inshaft. No wearing parts No lubrication Suitable for more misalignment than ordinary flexible coupling.

THE BELOIT WAY IS THE MODERN WAY



THE HOME OF ALBANY FELTS

Felts For: Leather Board Straw Board Box Board Bristol Board Tissue Bond Writings Insulation Board Mulch Paper Straw Paper Wrappings Glassine Newsprint Cellucotton Wall Board Soda Pulp Sulphite Pulp Building Papers Asbestos Papers Cement Shingles Blotting Book Chip Board News Board Cover Kraft Ledger Manila Rope Ground Wood Pulp Binders Board Toweling Condenser Paper Bottle Cap Board Catalogue Envelope Container Board Hanging Coating Boards Coating Papers Tag Board

SPECIALIZATION

Ours is a specialized business—that of making good paper machine felts. It is different from any other textile business in the world.

Our designers, spinners, weavers, research chemists, finishers, are all specialists with years of sound experience in felt making. Some of them have followed their particular line of work for 25 years.

Machinery, too, is special. Much of it is of our own design.

Our resources and world-wide experience have led the paper industry to bring all manner of problems to us involving the use of felts.

If you have an unusual machine condition which is bothering you, let us know about it. Perhaps we can help you.

ALBANY FELT COMPANY

ALBANY, NEW YORK

PACIFIC PUIP & PAPER INDUSTRY

THE PACIFIC COAST JOURNAL FOR PRODUCERS, CONVERTERS, AND DISTRIBUTORS OF PULP, PAPER AND BOARD

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Vol. 10

JANUARY, 1936

No. 1

PROPOSE NEW RAYON PULP MILL **FOR** VANCOUVER ISLAND

Tentative plans for the construction of Tentative plans for the construction of a rayon pulp mill on Vancouver Island, the third new pulp project to be under discussion in British Columbia during the last few months, have been revealed by Dai Thomas, Vancouver financier, who says that he is representing important interests in Great Britain.

Mr. Thomas and his son, D. M. Thomas, have held several conferences with the industrial committee of the Victoria City Council with a view to obtain-

toria City Council with a view to obtaining a site for the mill and assessment concessions. Nothing definite appears to have been done so far, although negotiations are still under way.

According to Mr. Thomas, Vancouver Island is considered as an advantageous location for a rayon mill because of the tidewater facilities and the prospect of more satisfactory labor conditions than on the British Columbia mainland. Establishment of the mill in Canada rather than in one of the northwest states is necessary, he says, because of the fact that it is proposed to dispose of most of mill's output in the British Isles, which might give a preference on Ca-

The Thomases represent interests who have formed a \$15,000,000 syndicate, according to their own statement. Investigations of the rayon pulp situation have

gations of the rayon pulp situation have been carried on by them in Canada during the last eight months.

Chief handicap to establishment of a mill near Victoria is lack of water supply. About 15,000,000 gallons of water daily would be required for washing and bleaching, according to Mr. Thomas, and no such familities are available close to

Victoria. Otherwise, the ocean docks at Ogden Point at the entrance to Victoria harbor would be considered satisfactory. Another proposed location is Sooke Harbor. Victoria city now obtains its water supply from Sooke Lake near Sooke Harbor, which in turn is about twenty-two miles west of Victoria. A pulp mill could either arrange to buy water from the city at the lake or establish its own pumping facilities at one of the rivers tributary to the lake. Waterfront facil-ities at Sooke are said to be all that is

It is proposed to build two sawmills in connection with the rayon plant. One would operate on hemlock for the pulp plant exclusively and the other would engage in the general export lumber trade to the United Kingdom. It has been suggested that the syndicate might take over the Canadian Puget Sound Lumber & Timber Company's sawmill which is located in Victoria's inner harbor and which went into liquidation some years ago. It is now the property of the city.

As for timber supply, Mr. Thomas says that extensive limits have already been acquired on Vancouver Island and

Other pulp enterprises that have developed recently in British Columbia are Canadian-American Pulp & Paper Mills, which contemplates the building of a 250-ton pulp mill at Prince Rupert this spring, and a 500-ton rayon pulp mill being promoted by William and J. P. Meehan of Vancouver for Squamish or Campbell River.

RAILWAY ADVISORY BOARD EXPECTS INCREASED SHIPMENTS

The report of the Paper, Paper Products and Pulp commodity committee of the Pacific Northwest Advisory Board, advisory to the Association of American Railroads, predicts increased Northwest shipments of paper and pulp during the first quarter of 1936.

The committee of which L. R. Gault is chairman and W. A. Brazeau is vice-chairman reported as follows:

"Replies received from the paper, paper products and pulp industry indicate that 1,138 cars will be required during the first quarter, 1936, as compared with 1101 during the case of the committee of the committee of the committee of the case of the c with 1101 during the same period of last year, an increase of 3.4 per cent. "Indications are that all of the mills in the Northwest territory will be oper-

ating to capacity during the next quarter. Orders in all lines, newsprint, wrapping paper, as well as pulp, now exceed the output of the mills.
"Practically all of the manufacturers

take a very optimistic viewpoint concerning the market and anticipate an increase probably greater than is shown by the figures set forth above."

SOUNDVIEW'S NEW DIGESTER STARTS

Number six digester installed by the Soundview Pulp Company of Everett, Washington, to smooth out their produc-tion schedule, went into operation De-cember 26, as originally planned.

This completes the major improvement program carried on by Soundview dur-ing 1935 aimed to improve the quality of pulp produced.

PRINCE RUPERT PROJECT RENAMED CANADIAN-AMERICAN

The Canadian-American Pulp & Paper Mills, Ltd., originally named Mutual Pulp & Paper Mills, Ltd., for incor-poration purposes, and in November, 1935, renamed the British-American Pulp & Paper Mills, Ltd., has made, through its officers, the following statement to PACIFIC PULP & PAPER INDUS-

"The Canadian-American Pulp & Paper Mills, Ltd., hereby desires to make the following statement with reference to

change of corporate name:

"Although the name, British-American
Pulp & Paper Mills, Ltd., was heretofore granted to the new company by the
Registrar of Joint Stock Companies of

the Province of British Columbia, inasmuch as protest was filed by the British Columbia Pulp & Paper Company, claiming similarity of names, it was deemed advisable to change the name to Canadian-American Pulp & Paper Mills, Ltd., and which name has now been of ficially approved and certificate therefore

ficially approved and certificate therefore received from the Registrar."

Mr. Frank L. Buckley of Vancouver, B. C., chairman of the board and managing director, returned to Vancouver from the Eastern part of the United States for the holidays, and shortly thereafter it was announced in Prince Rupert, B. C., where the Canadian-American Pulp & Paper Mills plan to construct a 250-

tons-per-day bleached sulphite pulp mill, that construction would start ninety days.

On December 24th, 1935, the Prince On December 24th, 1935, the Prince Rupert Daily News announced that "Word was received at the City Hall today from W. J. Alder, city commissioner, that he met Frank L. Buckley in Vancouver, who showed him complete blueprints of the proposed pulp mill here and assured him that construction would

commence within ninety days.

"Mr. Buckley also stated that it is expected the plant would be completed within a year, and that the sale of the output was arranged at market prices.
"The financial arrangements are pro-

ceeding satisfactorily."
PACIFIC PULP & PAPER INDUSTRY reproduces the drawings of the proposed Canadian-American mill which accompany this news story with the permission of Mr. Frank L. Buckley and of Mr. L. A. DeGuere, the pulp and paper mill engineer who designed the mill.

REPLACING DIGESTERS AT CAMAS

AND OCEAN FALLS
Two sulphite digesters at the Camas,
Washington, mill of the Crown-Willamette Paper Company are being replaced with new ones, and replacements are also being made at the Ocean Falls, B. C., mill of the Pacific Mills, Ltd., Canadian subsidiary of Crown-Willamette Paper Company.

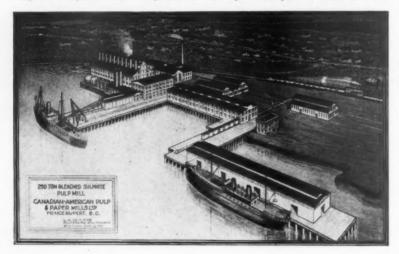
KILLEN REELECTED HEAD OF PORT ANGELES UNION James S. Killen was chosen for a sec-

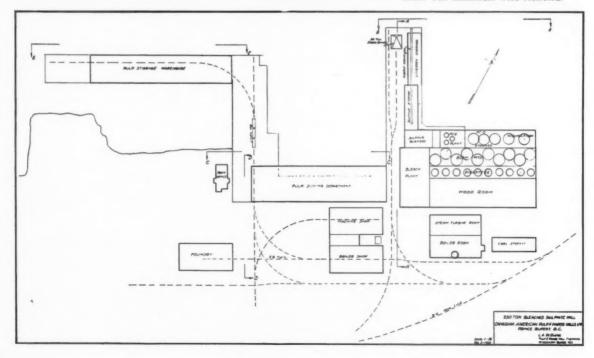
ond term as president of the Port Angeles local of the International Brother-hood of Pulp, Sulphite and Paper Mill Workers late in December.

Workers late in December.

Richard Apps was named vice-president; H. J. Peterson, corresponding and recording secretary; W. C. Adams, financial secretary; C. D. Earl, Sr., treasurer; A. Nansen, C. C. Jones and C. B. Keller, trustees; W. J. Benson, inner guard and E. D. Hervin, outer guard.

Apps, Jones and Benson are new officers. The remainder were reelected.





TAPPI PLANS SECTIONAL DINNER MEETINGS

To bring greater benefits to the pulp and paper mills on the West Coast by more frequently imparting specialized knowledge to the men of the industry, Mr. W. R. Barber, chairman of the Pa-cific Section of TAPPI and Mr. Carl Fahlstrom, chairman of the program committee, together with members of the executive committee, have outlined a comprehensive program of dinner meetings to be held during the spring months.

At these evening meetings speakers, who are experts in their particular fields, will discuss various pulp and paper mill problems. Following the talks there will be a period for questions and discussions.

Travelling for the individual members will be minimized by dividing the mills into locality groups. This will make it possible for more men to profit from the TAPPI meeting programs as most of them will need to be away from the plants for only one evening.

The first dinner meeting will be held in Portland, Tuesday, January 28th, for the mill men in the Portland area known as Locality Number 4. The second evening meeting will be at Everett, Washington, Tuesday, February 4th, for Locality Number 1.

March 3rd Locality Number 2 will meet in Port Angeles. Again on March 24th Locality Number 4, the Portland group, will meet in Portland. Locality Number 3 will meet the evening of April 7th at Olympia. Other meetings will be

announced later.
TAPPI is embarking upon this extensive educational program for the benefit of the industry and of all the men in it. Everyone is welcome to attend any locality meeting whether a member of TAPPI

The locality divisions and the mills embraced by each follow:

Chairman W. R. Barber announces the

LOCALITY No. 1—BELLINGHAM

1. Powell River Company
2. Pacific Mills Limited
3. Westminster Paper Mills Limited
4. Pacific Coast Paper Mills
2. Puget Sound Pulp & Timber Co., Belling-

Puget Sound Pulp & Timber Co., Ana-

6. Puget Sound Pulp & Timber Co., Al cortes.
7. Everett Pulp & Paper Co.
8. Soundview Pulp Company
9. Weyerhaeuser Timber Co.
10. B. C. Pulp & Paper Co.
LOCALITY No. 2—PORT ANGELES
1. Washington Pulp & Paper Corporation
2. Olympic Forest Products Co.
3. Fibreboard Products Inc.
4. Sidney Roofing & Paper Co.
5. National Paper Products Co.
6. Rainier Pulp & Paper Co.
LOCALITY No. 3—OLYMPIA
1. Grays Harbor Pulp & Paper Co.
2. Rainier Pulp & Paper Co.
3. St. Regis Kraft Co.
4. Fibreboard Products Inc.
5. Shaffer Pulp Co.
6. J. E. Berkeimer Mfg. Co.
7. Everett Pulp & Paper Co.
LOCALITY No. 4—PORTLAND

7. Everett Pulp & Paper Co.
LOCALITY No. 4—PORTLAND
1. Longview Fibre Co.
2. Pacific Straw Paper & Board Co.
3. Weyerhaeuser Timber Co.
4. Crown Willamette Paper Co., Cama.
5. St. Helens Pulp & Paper Co.
6. Fir-Tex Insulting Board Co.
7. Columbia River Paper Mills
8. Crown Willamette Paper Co., West Linn
9. Hawley Pulp & Paper Co.
10. Spalding Pulp & Paper Co.
11. Coos Bay Pulp Corporation
12. Crown Willamette Paper Co.
13. Oregon Pulp & Paper Co.
14. Coos Consultation of the Consu

Oregon Pulp & Paper Co.
 SCHEDULE OF MEETINGS
 Locality No 1 will meet at Everett, Wash., on February 4, 1936.
 Locality No. 2 will meet at Port Angeles, Wash., on March 3, 1936.
 Locality No. 3 will meet at Olympia, Wash., on April 7, 1936.
 Locality No. 4 will meet at Portland, Oregon, January 28, 1936.
 Locality No. 4 will meet at Portland, Oregon, March 24, 1936.
 Locality No. 5 and No. 6 will be outlined at a later date.

appointment of a committee, authorized by the executive committee of the Pacific Coast Section of TAPPI, to cooperate

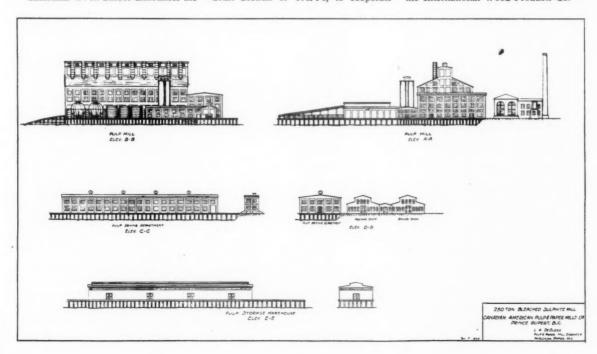
informally with the Department of Chemistry of the University of Washington on the design of equipment for the pulp and paper mill laboratory to be included and paper mill laboratory to be included in the new chemistry building now under construction, and which will be completed in December of this year. As members of this committee Mr. Barber appointed Mr. J. E. Ryberg of the St. Helens Pulp & Paper Company; Mr. Norman Kelly of the Pulp Division, Weyerhaeuser Timber Company; Mr. Norman Gibbs, of the Washington Pulp & Paper Corporation and the Olympic Screets, Products Company. Dr. F. Forest Products Company; Dr. E. C. Lathrop of the Crown-Willamette Paper Company, and Mr. James P. V. Fagan of the Puget Sound Pulp & Timber Company.

BUSINESS GOOD WITH PACIFIC COAST PAPER MILLS
Pacific Coast Paper Mills, Bellingham, Washington, manufacturers of "MD" toilet tissue and other tissue products re-port further expansion of sales of "MD". Originally placed on the market in Washington, sales have been opened in Oregon, California and at this time an introductory campaign of advertising and sales promotion for the product is being carried on in Utah and meeting with a

carried on in Utah and meeting with a very favorable response from the trade. Recently Pacific Coast Paper Mills placed on the market "Nook Naps", a product which is proving to be a fast seller. Nook Naps are special napkins in a holder designed to be placed on a breakfast nook table. One hundred napkin fillers sell for ten cents.

CROWN-WILLAMETTE REBUILDING CATHLAMET WOOD MILL

Crown-Willamette Paper Company is rebuilding the wood mill at Cathlamet, replacing the old structure and resetting the equipment and making some additions. This plant cuts cull logs, short logs and small logs, partly into wood for barging to Camas and West Linn and partly to supply material to the plant of the International Wood Products Co.



PUGET SOUND IMPROVES QUALITY AND UNIFORMITY

Bellingham Division Unbleached Sulphite Mill Installs Chemipulp System

On December 2nd the Bellingham Division of the Puget Sound Pulp & Timber Company began operating its new Chemipulp system on the production of unbleached sulphite pulp. The installa-tion of the Chemipulp system was made in record time.

According to Mr. Erik Ekholm, superintendent, "The system is complete in every

tendent, "The system is complete in every detail right from the start, having the precirculation feature and heater units for controlling and holding a uniform temperature in the accumulator. "The Chemipulp system at Bellingham started very smoothly and has already proved its value in making a more uniform and higher quality unbleached sulphite pulp. With the automatic, close control of the acid together with the precirculation feature, insuring uniform acid circulation feature, insuring uniform acid and temperature control throughout the digester, duplication of various types of pulp can be made according to specifi-

cation.
"To keep loss of time to a minimum during installation and to permit the start completely setup, a slip system to start completely setup, a slip form circular concrete housing five inches thick was constructed around the ac-cumulator concurrently with the lining of the vessel with acid-resisting brick by the Stebbins Engineering and Manufac-

turing Company.
"The Bellingham accumulator is of the spherical type, twenty-nine feet in di-



ERIK EKHOLM Superintendent

ameter, and will hold two and one-half charges of acid. The heating unit is automatically controlled from the oper-ating floor of the digester room through a Foxboro Stabiflo valve.

The heater is connected to a circulating pump with a 250-gallon per minute capacity, which circulates the acid

through the heater at a rate of eighteen feet per second, the pre-heated acid again entering the lower half of the accumu-lator through a special fitting. The en-tire piping system, fittings and pumps are made of corrosion resistant stain-

"The heater, or heat exchanger is approximately eight feet eight inches in over-all length and one foot in diameter Steel Foundry Company.

"Acid in the accumulator is held to a

pre-determined temperature by a Foxboro recording temperature controller which opens and shuts the steam valve into the heater. A bulb located in the accumu-lator transmits the acid temperature to

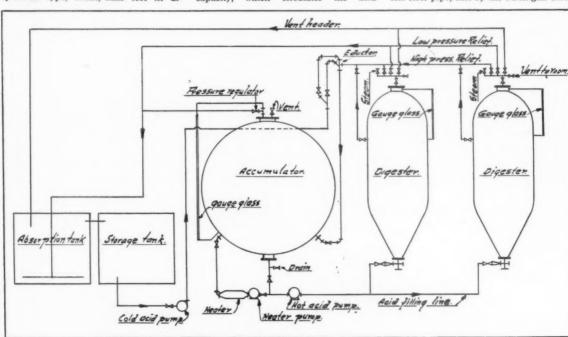
"The acid level in the accumulator is indicated in two ways.

A Foxboro liquid level gauge is serving

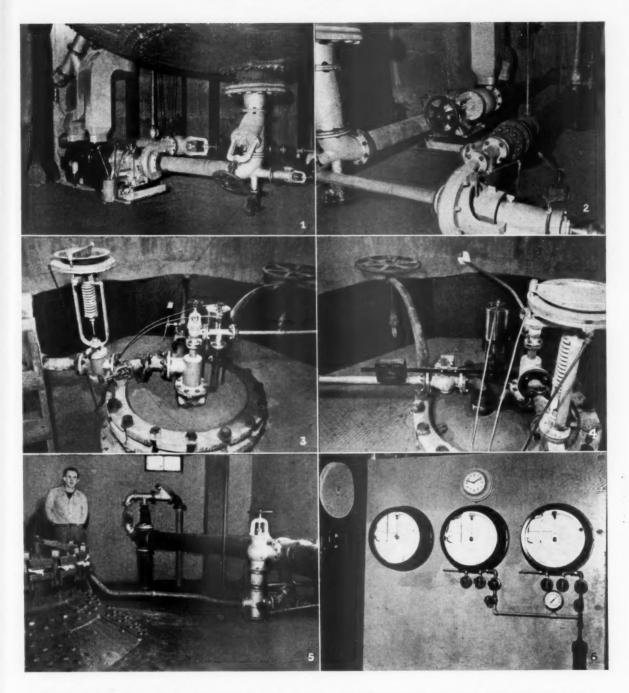
the operating floor of the digesters. The the operating floor of the digesters. The tube connecting the accumulator with the liquid level gauge being filled with oil to prevent the possibility of freezing. For checking purposes a liquor level glass is mounted on the accumulator housing. The stainless steel castings were all made by the Electric Steel Foundry Company of Portland, the valves being sold by the Doran Company of Seattle and cast to their patterns.

and cast to their patterns.

All piping is Misco Centricast stain-less steel pipe, cast by the Michigan Steel



FLOW DIAGRAM FOR RELIEF AND ACID PIPING. CHEMIPULP HOT ACID SYSTEM



THE CHEMIPULP INSTALLATION IN THE BELLINGHAM DIVISION PULP MILL OF THE PUGET SOUND PULP & TIMBER COMPANY

Photographs number 1 and 2 show the heat exchanger, the piping arrangement and the pumps, all of stainless steel. Note the ventilating ducts on the motor to prevent any possibility of acid fumes in the enclosed concrete accumulator building from damaging the motor shaft or windings. Also note the Foxboro Stabislo valve at the upper right of picture number 2.

Pictures number 3 and 4 show the Foxboro Stabilog automatic control at the top of the accumulator.

Number 5 shows the piping arrangement on the digester operating floor. Number six shows the instrument panel with the Foxboro recording liquid level gauge which indicates the acid level in the accumulator; in the middle, the Foxboro recording pressure controller, controlling and recording the pressure in the acid accumulator; and at the right the Foxboro recording temperature stabilog, which automatically holds the temperature of the acid in the accumulator at a pre-determined point.



The Acid Accumulator

Casting Company of Detroit for whom Mr. R. E. Chase of Tacoma is the Pacific Northwest representative.

All recording and controlling instruments were manufactured by the Foxboro Company, of which Mr. B. W. Sawyer of Portland is the Northwest representative. The instruments employed in this installation are a recording temperature stabilog, a recording pressure controller and a recording liquid level gauge.

Special Insulation

The piping is covered with an efficient insulating material made of waste sulphite liquor which requires no wrap-

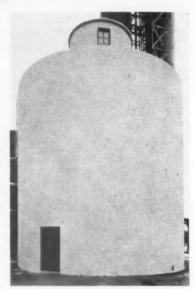
ping to hold it in place. This new insulation was developed at Bellingham, and its efficiency has been thoroughly tested on one of the digesters, where it has been in service for over two years and during this period no cracks have developed.

The Pre-Circulation Method

When the digester is full of acid the vent line is closed, and pumping continued until a hydraulic pressure of 40-55 lbs. is built up in the digester. The pressure to which the digester is pumped varies in different plants due to local conditions. As soon as the pressure which has been found to be most economical has been pumped on the digester, the top and side relief valves are opened, and liquor is vented back through the high pressure header to the eductor and thence to the accumulator. Thus hot acid from the accumulator is circulated through the digester during the time heat has been added to the acid through the heat exchanger, until the temperature of the precirculated acid has been brought up to a point to create the disassociation of water and water solubles from the chips.

The effect of the percirculation and reconditioning of the acid is very noticeable. The major portion of the inert gases and water solubles are washed from the chips, thus bringing each chip to a uniform moisture content by this acid treatment before the actual cooking starts. At the same time the temperature throughout the entire mass of chips is equalized. This precirculation requires from one and one-half to two hours, depending somewhat on the moisture content of the chips, the size of the digester, and other local conditions at the mill.

When the top and bottom temperatures in the digester have been equalized and the desired temperature reached, the top and side relief valves are closed, the digester again pumped to the desired pressure, the acid inlet valve is then closed and the digester pump shut down. The



The Accumulator Building

digester is then ready for streaming and may be brought rapidly up to cooking pressure and temperature due to advanced and almost perfect penetration, thus materially reducing the actual cooking time from steam to blow with a much improved all-around pulp characteristic.

improved all-around pulp characteristic.
Mr. A. H. Lundberg of Seattle, Pacific Coast representative of Chemipulp Process, Incorporated, of Watertown, New York, designed the Bellingham installation and supervised its installation together with Mr. Erik Ekholm, superintendent for the Puget Sound Pulp and Timber Company.

CRAYS HARBOR TO BUILD CHIPPING PLANT

Construction started early in January on a \$50,000 log break-down and chipping plant for the Grays Harbor Pulp & Paper Company of Hoquiam, Wash. Mr. W. S. Lucey, general manager, made the announcement late in De-

Mr. W. S. Lucey, general manager, made the announcement late in December. He stated that the new wood preparation plant will be located just west of the paper mill, between the mill and the mouth of the Hoquiam River.

The plant will augment the present supply of chips and insure a constant flow of wood to the pulp mill. Small hemlock logs will be cut to twenty foot lengths and sawn into cants for chipping on a nine-foot band saw. The breakdown plant will also include a single rip saw.

Complete cleaning equipment will be installed to insure clean wood only reaching the chippers.

ing the chippers.

The plant will occupy a space approximately 150 feet square, and will be ready for operation early in the spring.

for operation early in the spring.

Mr. Lucey stated that the present chipping plant will be maintained for chipping cordwood, and the chipping plants at the Polson Lumber and Shingle Company's and Schaefer Brothers' mills will operate as in the past.

Approximately 25 men will be employed in the new break-down and chipping plant.

An enclosed conveyor will carry the chips to the chip storage bins above the digesters.

INLAND EMPIRE OBTAINS RFC LOAN

The Inland Empire Paper Company of Milwood, Washington, was recently granted a loan of \$500,000 by the Reconstruction Finance Corporation.

The money will become available to the company upon the approval of final reorganization details which were to be presented to the Federal Court in Spokane on January 9th, 1936.

kane on January 9th, 1936.

The reorganization details include the conversion of the company's bonds into preferred stock which will be subordinate to the RFC loan. When the plan is placed in operation the company will show a strong financial statement.

Inland Empire will enlarge its production of groundwood specialties which it has been making for many years, and will gradually include a small proportion of higher grades of paper formerly made by the mill

TRADE TREATIES PLEASE BRITISH COLUMBIA

Provision in the new United States-Canada trade agreement for three more years of free entry into the United States of Canadian newsprint was good news to British Columbia paper manufacturers, even though it had been anticipated. Powell River Company, which sells extensively in Texas and the western states, and Pacific Mills, Ltd., which also caters to the American market as a subsidiary of Crown-Zellerbach Corporation, gain most among the British Columbia producers.

B. C. Kraft producers and manufacturers of other heavy wrapping paper were happy this month because of word from Australia that a new trade agreement had been reached with Canada allowing entry of these products into the commonwealth at a reduced rate.

FROTHINGHAM VISITS COAST

Frank Frothingham, western manager of the Bird Machine Company of South Walpole, Massachusetts, spent several weeks on the Pacific Coast during December, calling on a number of the mills from Los Angeles to the Canadian line.

Mr. Frothingham, whose headquarters are in Chicago, drove through the southwest to Los Angeles and then north. He returned the same way, making a stop at New Orleans before returning to Chicago.

CROWN-WILLAMETTE FETES OLD TIMERS

On Saturday, December 21st, the Crown-Willamette Paper Company gave a dinner to veterans of the Camas, Washington, mill.

P. F. Middlebrook addressed the "Old Timers," reminiscing of the old days at the Camas mill. A letter from Vice President George P. Berkey expressed the good wishes of president Louis Bloch and himself and their regrets at being unable to attend.

M. F. Farrell, thirty-six years in the service of Crown-Willamette, was the oldest veteran in point of service who attended the dinner. G. C. Potter, who was unable to be present, has an equal record of service.

Those present were: J. H. Wilson, J. H. Schick, J. W. Tietz, Dave McMills, O. H. Knapp, O. L. Scarborough, H. C. McLean, George Mott, James F. Anderson, C. N. Gardner, Charles Wicher and J. A. Pluss.

J. A. Pluss.

Those "Old Timers" who were unable to be present were: A. F. Henderman, J. F. Caywood, John Gittings, M. C. Skates and John Stuber.

The photograph below shows the "Old Timers" group at dinner in the Crown-Willamette Inn at Camas. Place cards at the table were mounted on cellophane wrapped napkins, towels and a roll of toilet paper, all products of Crown-Willamette's Camas mill.

Each man present received a picture of the group.

WEST LINN HOLDS "OLD TIMERS" DINNER

The retired employees of the West Linn, Oregon, mill of the Crown-Will-amette Paper Company were honored at a dinner given by the company at the West Linn Inn on December 18th. The affair is an annual event.

Mr. C. E. Bruner, mill manager of West Linn, acted as toastmaster, and the speakers were Mr. T. W. Sullivan, hydraulic engineer of the Portland General Electric Company, and Mr. J. E. Hedges, Oregon City attorney.

Mr. Sullivan spoke on the early construction work at the Willamette Falls and Mr. Hedges entertained the guests with reminiscences of the pioneer days in Oregon City.

The retired employees who gathered together to discuss old times and renew acquaintances were: A. M. Sinnott, W. H. Lightowler. Tom Warner, Si Mosier, Grant Criteser, J. D. Baker, Clint Cole, M. E. Clancey, E. L. Shaw, F. Forsberg, Joe Lynch, H. Baxter, W. J. McKillican, George Rakel, J. A. Ream, Sr., E. A. Leighton, Olaf Larson and R. Simmons.

William Godfrey and E. S. Jarrett were unable to attend.

Other guests included Captain W. T. Reed of the U. S. Army Engineers; C. R. Lewthwaite, townsite manager for Pacific Mills, Limited, at Ocean Falls, B.C.; P. Laurs of the Oregon City Enterprise; M. J. Otis, assistant mill manager at West Linn; J. A. Ream, safety and personnel supervisor at West Linn, and R. O. Hunt, West Linn office manager.

SWEDISH PULP OUTPUT FOR 1935 WILL SHOW GAIN

American Commercial Attache Watson of Stockholm, Sweden, reported in December that the output of all types of pulp, with the exception of groundwood, would apparently show a gain for 1935 over 1934. Mr. Watson's opinion was based upon the exceptionally large exports of pulp from Sweden.

Commercial Attache Watson also re-ported that the principal development of interest in the Swedish sulphite industry during the late Fall was the efforts of the Sulphite Pulp Suppliers to devise a means of cooperation between its mem-bers which would effectively bring about the primary aims of the organization, i. e., the adjustment of sulphite production to demand. Two difficulties with which the industry has had to contend are that throughout the five years in which limitation on output has been in effect, no effort has been made in some of the participating countries to limit the construction of new sulphite mills; and that while members of the SPS had agreed to cut down production, no such action was taken by manufacturers of sulphite paper who also manufactured pulp for use in their own mills. Further diffifficulty has been experienced from the fact that certain paper mills, which had previously consumed their output of pulp, had begun to sell small lots of sulphite in the open market.

At the beginning of the third quarter, only a small percentage of the estimated output of sulphite pulp during 1935 contonued unsold. By the end of July practically the entire output for the year had been placed. The situation in the German market is causing increased concern to Swedish sulphate manufacturers. Competitionon the part of Germany is becoming more keen, and German customers are reported to be finding it more and more difficult to obtain import license for Swedish sulphate pulp. A more optimistic factor in the export situation was provided by the Swedish-Spanish trade agreement reported toward the end of August which more or less assured Swedish shippers of a continuation of Spanish imports in the same quantities as had been received in former years.



HILL SELECTED AS PLANT ENGINEER FOR WEYERHAEUSER EVERETT MILL

L. E. Hill, Jr., has been named as plant engineer for the Weyerhaeuser unbleached sulphite pulp mill under construction at Everett, Washington, according to an announcement by G. S. Brazeau, manager of the Everett unit of the Pulp Division.

Mr. Hill joined the Weyerhaeuser organization October 1st after eight years with the Grays Harbor Pulp & Paper Company at Hoquiam. He is a graduate of the United States Naval Academy class of 1921. After six years in the navy Mr. Hill resigned to do engineering work for Grays Harbor.

Steady progress is being made toward completion of the Everett unit of the Weyerhaeuser Pulp Division. All of the buildings were completed early in January with the exception of the chipping plant for which the frame was erected.

Wood tanks for stock and acid are rapidly being erected and most of the remaining work consists of tieing into pipelines and installing the balance of the machinery.

Mr. O. C. Schoenwerk, pulp and paper mill engineer, who designed the Everett plant as well as the first Weyerhaeuser pulp mill at Longview, is supervising the construction of the Everett unbleached sulphite pulp mill.

Mr. R. B. Wolf is general manager of the Weyerhaeuser Pulp Division.



The "Old Timers' Dinner," Given By the Crown-Willamette Paper Company at Camas, Washington, December 21st

PRACTICAL APPLICATIONS OF THE PHOTO-ELECTRIC CELL IN THE PULP MILL

By HAROLD A. HAUFF Research Department, Pulp Division, Weyerhaeuser Timber Co., Longview, Wash.

A few years ago a photo-electric cell was a scientific curiosity — something bordering on the occult. Today they are used in every walk of life and while their operation is still almost uncanny to the layman, the "Electric Eye", as it is uncommonly called, is rapidly becoming an invaluable tool in the modern industrial and scientific world. industrial and scientific world.

In general the photo-electric cell gives the scientist the use of light as a means of measurement or control. The microphone and amplifier made it possible for the engineer to use sound for other than communication and now the photo-electric cell allows the use of light for other than illumination. The light beam, now controlling many processes, requires no space, is instantaneous, has no inertia, and is inexpensive to maintain and install. The uses to which a photo-electric cell may be applied are limited only by the ingenuity and imagination of the engineer. They may be used for precise spectro-photometric measurements or for turning on a street light at a predetermined degree of darkness. The voice of your favorite screen star is brought to you by another application of the photo-electric cell and the cigar you smoke has been probably graded with the "electric eye."

It would be possible to discuss at length the properties, applications, and limitations of the various types of photoelectric cells and to mention many novel and interesting uses of them. Many very excellent volumes have been



this subject. However, it is thought that a few proven examples may serve to bring these new tools to the attention of the instrumentation engineer and the pulp and paper mills.

Photo-Electric Consistency Meter

This instrument is based on the difference in opacity of a stock suspension at varying consistencies as referred to water as a standard and consists of a

photo-voltaic cell together wkith a sensitive microammeter and adjusting resistance, a cell through which the stock flows continually, and a light source with means of maintaining constant voltage on the light.

At the present time we have two of these meters in service, one operating on unbleached stock before screening at a consistency between 0.25% and 0.35% A. D. and the other on bleached stock between 0.30% and 0.45% A. D. These instruments have been in service approximately a year and have been found to measure these consistencies within plus or minus 0.01% of the true figure.

The control of a Selsyn motor operated valve regulating the consistency is located beside the meter. This the opera-

tor may accurately change or regulate the consistency without leaving the screen

As to checking: First the light voltage is set at the desired value, the stock flow shut off, and water is passed thru the cell giving a reading for zero consistency. The microammeter is set at zero by means of an adjusting rheostat and upon opening the stock valve the instrument is ready for service. The indicating instrument may be calibrated to read consistency directly or the regular microampere scale used and the consistency found from a conversion table.

While we have not used our set up as an automatic regulating device, the addition of suitable relays should enable the operator to forget consistency



Control Panel of Photo-Electric Cell Stock Consistency Indicator showing consistency of stock flowing over flat screens.

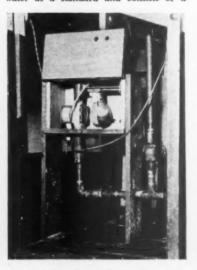


Photo-Electric Cell Setup of Stock Consistency Indicator

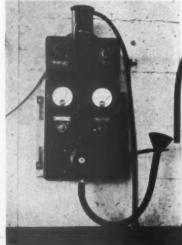


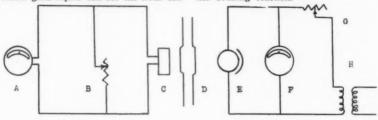
Photo-Electric Cell Cooking Liquor Color Comparator

variations within the sensitivity of the instrument. Experimental work has been done up to 1.5% consistency obtaining satisfactory results and we believe that proper modification of equipment will al-low the use of still higher valves. This instrument may be adopted to many consistency problems with only slight changes. A large consistency variation may be measured or full scale deflection may be obtained over some short range by different types of stock cells.

Cooking Liquor Color Comparator

As all operators know, liquor color will give a very good indication of the progress of a sulfite cooking reaction. However, it is very difficult to give this an absolute value as no two operators will evaluate, by eye, any series of samples the same. No two persons see things The older idea of a series of dyestuffs whereby the men have something with which to compare their samples, is a makeshift at the best. We have found that it is possible to apply the photo-electric cell to this and thus secure a numerical figure that removes the man equation from this problem. Sulfite liquor has a decided red and infrared component and the human eye is very insensitive to variations in this part the spectrum while the photo-electric cell is quite responsive to these wave lengths.

The instrument used is an application of the same circuit described in the fore-going paragraphs, substituting a special blown glass liquor cell for the stock cell of the consistency meter. In operating, water is run into the cell and the instrument set to zero. After draining, the liquor is run thru and a reading taken of the microammeter. This gives an emeprical value that may be taken as a measure of the color intensity and has been found over many months of operation to give very precise indication of the cooking reaction.



- Rheostat Photo-cell
- Stock Cell Voltmeter
- Rheostat Voltage Regulating Transformer



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ROBERT BUNDY Manager Fibreboard, Port Angeles

WASHINGTON PULP AIDS

CHRISTMAS FUND
The "Beacon Bill" Christmas fund of the Port Angeles Evening News was materially increased by contributions of \$125 from the employees of the Washington Pulp & Paper Corporation and of \$400 from the company itself.
The annual Paper Makers Ball, held

at Thanksgiving time, also contributed a large sum to the fund.

LEARNED REELECTED UNION PRESIDENT

Samuel M. Learned, Jr., was chosen to head for another year the Port Townsend Local 304 of the International Brotherhood of Paper Makers.

Other officers elected were: George Parmeter, vice-president; Vern White, corresponding secretary; Edward O. C. Will, treasurer; Fred Simcoe, financial secetary; and Bud LeMere, Ed Dupuis and Herb Bromley, trustees.

The membership expressed its satisfaction with the work done by the local during 1935.

MARTIN TO MANAGE FIBREBOARD PORTLAND PLANT

J. B. Martin, who has been manager of the Fibreboard Products, Inc., plant at Port Angeles, Wash., has been advanced to manager of the newly acquired plant of the company in Portland. This unit of the company, to be operated as the Fibreboard Products, Inc., F. C. Stettler Division, is running steadily and will continue to produce a variety of paper and fibre board containers. No particular fibre board containers. No particular change in products is anticipated, though plans are being worked out to increase the volume of sales.

Prior to taking charge of the Portland plant, Mr. Martin spent 13 years at the Port Angeles plant of the company, where the company operates a sulphite pulp and paper mill. Previous to that he spent some years in the sawmill business, being connected with the operations of the Charles Nelson Company at Port Angeles.

G. C. Jarrett has been made general superintendent of the Portland plant. He has been connected with the manufacturing division of the Stettler organization for six years and prior to that was employed by Fibreboard Products, Inc., at its Stockton, Cal., plant.

T. L. Eichenberger, who for 6 years has been accountant at the Port Angeles plant, of Fibreboard Products, Inc., has been moved to Portland and made accountant of the F. C. Stettler Division.

Robert E. Bundy, who has been assist-ant manager of the Port Angeles Fibreboard mill since 1930, has been promoted the managership, succeeding Mr. Martin.

ANNOUNCE NEW CANADIAN NEWSPRINT MILL

The Ontario Paper Company, through its president, Arthur A. Schmon, re-cently announced that it will construct a newsprint mill at Comeau Bay on the Manicouagan River near Rimouski, Quebec. The new plant will cost \$8,000,000, Mr. Schmon announced.

The company will first proceed with the completion of its water power development on the Ontarde River in the same district. Work on the newsprint mill will begin during 1936.

The Ontario Paper Company is an



J. B. MARTIN Manager Fibreboard, Portland

affiliate of the Chicago Tribune and the New York Daily News, and now operates a newsprint mill at Thorold, Ontario.

E. M. MILLS RESIGNS ZELLERBACH **OFFICES**

It was announced on January 9th by Mr. Louis Bloch, chairman of the board of Crown-Zellerbach Corporation, that Mr. Edward M. Mills had resigned as executive vice-president and member of the executive committee. The resignation became effective December 31st.

Mr. Mills will continue as a member of the board of directors of Crown-Zellerbach and to act as voting trustee for common stock of the corporation.

Mr. Mills is president of the Rainier Pulp & Paper Company, the Grays Harbor Pulp & Paper Company and the Olympic Forest Products Company. Increasing activities of these companies are taking more of his time and for that reason Mr. Mills felt it necessary to resign his Crown-Zellerbach posts.

WESTINGHOUSE CELEBRATES FIFTIETH ANNIVERSARY

On the evening of January 8th the 43,000 employees of the Westinghouse Electric & Manufacturing Company gathered at banquets throughout the United States and foreign countries to celebrate the Golden Jubilee of the West-

inghouse Company.

By short wave radio from the Westing-house pioneer radio station KDKA in East Pittsburgh, Pennsylvania, they heard president F. A. Merrick and chairman of the board A. W. Robertson outline the achievements of the Westinghouse organization in the electrical industry since it was chartered in 1886 by George Westinghouse and his associates.

It was pointed out by the speakers that Westinghouse had led the electrical industry in the development of many servants of mankind. Among these the first was the transformer which made possible the whole alternating current system, in universal use today in North America. That was in 1886, the first year of the company's existence. From then until 1935 each year brought forth additional contributions to the knowledge and equipment of the electrical industry from the laboratories and shops of Westinghouse.

In 1935 Westinghouse installed the largest single shaft turbine generator unit in the United States, built two of the largest waterwheel generators in the world, rated at 82,500 KVA for Boulder Dam, developed high intensity mercury lighting, built one of the most extensive sodium vapor highway lighting installations in the country, and equipped the New York, New Haven and Hartford Railroad streamlined train "Comet" with Westinghouse diesel engines and electrical equipment throughout.

Dinners were held in all Pacific Coast cities. At Seattle approximately 150 employees of the Westinghouse organization in the Pacific Northwest gathered for dinner at the Washington Athletic Club. Mr. W. D. McDonald Northwest manager since 1914, acted as toastmaster and outlined the growth of Westinghouse in the Pacific Northwest since the first representative of the company arrived in Seattle in 1900.



W. D. McDONALD Westinghouse Northwest Manager

After the dinner a new Westinghouse talking moving picture entitled "The New Frontiers" was shown to the guests. The picture outlines in an interesting way the history of electrical development and the very important part contributed by Westinghouse.

The moving picture impressed the audience with the limitless possibilities ahead in the use of electrical power to be brought about through continuous re-

search.

Each guest was presented with a copy of "Adventures in Power, A Fact History

of Westinghouse."

When the Westinghouse Electric & Manufacturing Company was chartered in 1886 the company had representatives in five cities. Today it has sales organizations in 103 cities in the United States, warehouses at 27 strategic points and operates 36 service shops. In addition, Westinghouse products are distributed through 93 jobbers. Overseas sales are handled by the Westinghouse International Company with representation in more than 80 countries.

SEPTEMBER NEWSPRINT STATISTICS

Production in Canada during September, 1935, amounted to 223,892 tons and shipments to 225,403 tons, according to the Newsprint Service Bureau. Production in the United States was 71,416 tons and shipments 73,161 tons, making a total United States and Canadian newsprint production of 295,308 tons and shipments of 298,564 tons. During September 27,161 tons of newsprint were made in Newfoundland and 1,540 tons in Mexico, so that the total North American production for the month amounted to 324,009 tons. Total production in September, 1934, was 297,889 tons.

The Canadian mills produced 95,254 tons more in first nine months of 1935 than in the first nine months of 1934, which was an increase of 5 percent. The output in the United States was 42,651 tons or 6 percent less than for the first nine months of 1934, in Newfoundland 12,885 tons or 5 percent more, and in Mexico 627 tons more, making a total increase of 66,115 tons, or two and threetenths percent.

Stocks of news print paper at Canadian mills were reported at 73,818 tons at the end of September and at United States mills 16,490 tons, making a combined total of 90,308 tons compared with 93,564 tons on August 31, 1935.

NOVEMBER NEWSPRINT STATISTICS

Production in Canada during November, 1935, amounted to 262,854 tons and shipments to 285,179 tons, according to Newsprint Service Bureau. Production in the United States was 78,929 tons and shipments 80,875 tons, making a total United States and Canadian newsprint production of 341,783 tons and shipments of 366,054 tons. During November 28,567 tons of newsprint were made in Newfoundland and 2,045 tons in Mexico, so that the total North American production for the month amounted to 372,395 tons. Total production in November, 1934, was 346,189 tons.

The Canadian mills produced 148,809 tons more in the first eleven months of 1935 than in the first eleven months of 1934, which was an increase of 6 per cent. The output in the United States was 39,315 tons or 4 per cent less than for the first eleven months of 1934, in New-

foundland 17,162 tons or 6 per cent more, and in Mexico 905 tons more, making a total increase of 127,561 tons, or three and six tenths per cent.

Stocks of newsprint paper at Canadian mills were reported at 50,993 tons at the end of November and at United tSates mills 12,394 tons, making a combined total of 63,387 tons compared with 87,658 tons on October 31, 1935.

PACIFIC MILLS RETIRES MORE BONDS

Pacific Mills, Limited, Canadian subsidiary of Crown-Willamette Paper Company, is planning to further reduce its funded debt. Five hundred thousand dollars of its first mortgage 6 per cent bonds have been called for redemption February 1st at 101½.

On August 1st, 1935, Pacific Mills retired \$1,100,000 serial 6 per cent bonds thereby wiping out all but the mortgage obligations. When the \$500,000 first mortgage bonds are redeemed February 1st, but \$900,000 mortgage bonds of its funded debt will remain.

Crown-Willamette Paper Company on January 1st retired \$5,500,000 of its bonded debt.

MEXICAN PLANT CHANGE

An announcement has been sent out by Cia. de las Fabricas de Papel de San Rafael Y Anexas, S. A., Mexico City, Mexico, that Don Jose de la Macorra, Sr., who for many years has been directing the manufacturing activities of the company, has retired and has been succeeded by his son, Don Jose de la Macorra, Jr.

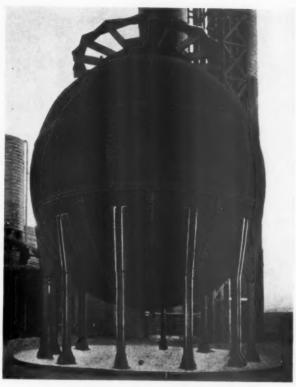
The company operates two mills, one at San Rafael and the other at Progreso Industrial. Equipment includes 11 paper machines. Products include writing, news, wrappings, coated, cover, rag, bond, litho, art, rotogravure, bleached and unbleached sulphite and ground wood pulp. The daily capacity is 250 tons of paper, 225 tons of wood pulp, 10 tons of bleached and 37½ tons of unbleached sulphite.

ZINC PIGMENTS IN PAPER AFFECT ALPHA CELLULOSE, COPPER NUMBER AND ACIDITY TESTS

Consideration of fiber purity in terms of alpha cellulose content and copper number has been recommended by the National Bureau of Standards in choosing record papers that are required to have a long life. It has been found, however, that when papers contain zinc pigments, the test values obtained by the present methods are affected. P. F. Wehmer, chairman of the TAPPI subcommittee on Chemical Methods for Paper Testing has reported that amounts of zinc sulphide commonly used in papers appreciably increase the test values for both alpha cellulose and copper number. Furthermore, that the total acidity value, obtained by titration of an aqueous ex-tract of the paper, is reduced. Until modified testing procedures can be developed to avoid the errors caused by the zinc pigments, the probable stability of papers containing them must be judged in some other way.

Another criterion recommended by the bureau for this purpose is the amount of folding endurance retained by paper on heating it, and the bureau believes this test to be of particular value in cases where other criteria cannot be used.

The Chemipulp System



The Accumulator – the Heart of the Chemipulp Process

QUALITY and UNIFORMITY of product are of paramount importance, particularly in the production of sulphite pulp for the North American market. This improvement in pulp quality is reflected in the final product made from the pulp, and in addition, assures lower cost of converting the pulp into paper. We have the testimony of many paper makers to the effect that the improved QUALITY and UNIFORMITY of the pulp produced by THE CHEMIPULP PROCESS has enabled them to run more steadily at a higher machine speed and produce a better paper than they have been able to accomplish before.

One of the prime considerations of the Puget Sound Pulp and Timber Company in purchasing the CHEMIPULP SYSTEM for their Bellingham Mill was to improve the QUALITY and UNI-FORMITY of the pulp.

This installation at the Bellingham Mill of the Puget Sound Pulp and Timber Company is one of forty-two Systems in operation or in process of installation in the United States and Canada with a total production of over 1,750,000 tons of pulp annually.

All grades of pulp manufactured are now being made from pulp produced by THE CHEMIPULP PROCESS and, in addition, a large tonnage of pulp is now being produced for the manufacture of rayon.

Broadly protected by patents in the North American continent and Europe.

CHEMIPULP PROCESS, INC.

Woolworth Building
Watertown, N. Y.

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Pacific Coast Office: 3311 First Ave., So. Seattle, Washington

and in Canada

Chemipulp Process, Ltd., 403 Crescent Bldg., Montreal, P. Q.

FOREST SURVEY REVEALS GRAYS HARBOR AREA HAS LARGEST STAND of HEMLOCK and SPRUCE **PULPWOOD**

Of great interest and value to the pulp and paper industry is the report issued early in December by the Pacific Northwest Forest Experiment Station of Portwest Forest Experiment Station of Port-land, a division of the United States Forest Service, entitled, "Pulpwood Re-sources of Western Oregon and Western Washington." Thornton T. Munger is director of the experiment station.

The report, known as Forest Notes Number 17, was prepared by H. J. Andrews, R. W. Cowlin, F. L. Moravets and W. H. Meyer from the inventory phase of the forest survey completed in 1934 in the Douglas fir region by the

Forest Service.

Much of the data offered in this report was published on pages 23 to 29 inclusive of the 1935 Review Number of PACIFIC PULP & PAPER INDUS-TRY, issued in June, 1935. Since then more data has been studied and coordinated and a detailed report issued which is illustrated with maps.

For the purpose of the Forest Survey Western Oregon and Western Wash-Washington was divided into eleven forest units. Unit number four is called the Grays Harbor Forest Unit. It embraces the western half of Jefferson County, and all of Grays Harbor and Pacific Counties. The data gives totals for state, federal and private ownership in all

According to the tables accompanying the Forest Survey the Grays Harbor unit possesses the largest stand of all the units of Western Hemlock pulpwood, four inches and more in DBH (diameter breast height), available for cutting. The total in Grays Harbor unit of all ownerships both saw timber and second growth is given as 5,582,141,000 cubic feet.

Saw timber is classified as trees 16 inches or more DBH and understory trees from 4 to 14 inches DBH. Second growth is classed as trees from 4 inches to about 20 inches DBH.

The Grays Harbor unit also stands first among the eleven units in its stand of second growth Western Hemlock with

537,365,000 cubic feet.

The quantity of Sitka spruce pulpwood, 4 inches and more in DBH, available for cutting, is also larger in the Grays Harbor unit than in any of the other units, the total being 935,676,000 cubic feet. It also leads in second growth Sitka spruce with 158,792,000 cubic feet.

In the stand of balsam firs, 4 inches and more in DBH, the Central Puget Sound Forest Unit (number 2) leads with 1,817,123,000 cubic feet. The North Puget Sound Forest Unit is second with 1,620,633,000 cubic feet, and the Grays Harbor unit is third with 1,446,457,000 cubic feet.

The Grays Harbor Forest Unit also leads in acreage on which stands of pulpwood species of saw timber size predominate, with 887,000 acres.

The authors of the report classify annual growth as current annual, realizable mean annual and potential annual

growth. The report explains this classification as follows:

"Current annual growth is the annual growth of all second-growth stands in their present condition. Realizable mean annual growth is the hypothetical average annual growth of all existing stands from now until the time they are cut, computed by decades. Potential annual growth is the average annual growth that, with intensive forest practice, can be ob-tained on all commercial forest lands after all non-growing virgin forests have been replaced by young forests. In computing this value an allowance of 25 per cent has been made for incomplete stocking, temporarily bare areas, and permanently non-restocked areas."

The Central Puget Sound units leads in current annual growth with 48 million cubic feet, and the Grays Harbor unit is second with 42 million cubic feet The Central Puget Sound unit also leads in realizable mean annual growth with 47 million cubic feet and the Grays Harbor unit is second with 40 million cubic

feet.

In potential annual growth the Grays Harbor unit leads all the others with 179

million cubic feet.

The Pacific Northwest Forest Experiment Station, in introducing the report, quotes from Senate Document 105, "National Pulp and Paper Requirements in Relation to Forest Conservation," as fol-

"Increasing attention is being given to the possibility of making the United States permanently self sufficient in its paper, pulp and pulpwood requirements. paper, pulp and pulpwood requirements. A steady increase in consumption of paper and other wood cellulose products, accompanied by a corresponding increase in imports of paper, pulp and pulpwood, has aroused considerable interest in the quantity of standing timber in this country suitable for pulpwood. Any significant expansion of pulpwood production in the United States can take place only in the Pacific Northwest. take place only in the Pacific Northwest, in Alaska or in the South."

Senate Document 105 was reviewed in detail in the August, 1935, issue of this

journal.

Following is a list of tables and figures appearing in Forest Research Notes Number 17, "Pulpwood Resources of Western Oregon and Western Washington:"
Figure 1. Map of Oregon and Washington showing the eleven forest units of the Douglas fir region.

Table 1. Volume of western hemlock inches and more in DBH available for cutting, by ownership, in thousands of cubic feet.

Volume of Sitka spruce 4 inches and more in DBH available for cutting, by ownership, in thousands of cubic

Volume of balsam firs 4 inches and more in DBH available for cutting, by ownership, in thousands of cubic feet.

Volume of mountain hemlock and Engelman spruce 4 inches and more in DBH available for cutting, by ownership, in thousands of cubic feet.

Volume of black cottonwood 4 inches and more in DBH available for cutting, by ownership, in thousands of

- Volume of pulp timber species available for cutting, by ownership and forest units, in thousands of cubic
- 7. Volume of pulp timber species available for cutting, by ownership and forest units, in thousands of cords.
- Volume of sound wood in cull saw timber trees in stands available for cutting, by species and ownership, in thousands of cords.
- Economic availability of pulp species of saw log size.
- 10. Areas of principal pulpwood types available for cutting, by ownership.
- 11. Comparative areas of pulpwood types and other types of saw timber size, in thousands of acres.
- 12. Current, realizable, and potential annual growth on areas available for cutting, all pulpwood species combined.

Figure 2. Cords of pulpwood in saw tim-ber trees over 16 inches DBH.

- Cords of pulpwood in other than saw timber trees.
- Distribution of major pulpwood types.
- Distribution of pulpwood volume, depletion and growth and of pulp mill capacity.

SOUNDVIEW STOCK LISTING APPROVED

On December 17th, 1935, the San Francisco Stock Exchange approved the listing of 83,700 shares of capital stock, par value \$5 of the Soundview Pulp Company of Everett, Washington.

The company originally had only 4,-185 shares of stock, \$10 par value, outstanding. On November 7th the directors authorized the exchange of two shares of new stock for each share of the old \$10 par value stock. At the same time they declared a dividend of 18 shares of the new stock. There is now outstanding 20 shares of the new \$5 par value stock for each share of the old \$10 par value stock.

RAINIER APPLIES TO LIST JUNIOR STOCK

The Rainier Pulp and Paper Company of Shetlon, Washington, has filed an ap-plication with the San Francisco Stock Exchange to list voting trust certificates for 123,000 shares of Class B no par value common stock.

Application to list the stock has been approved by the listing committee of the exchange and this approval will become effective at a date to be announced later.

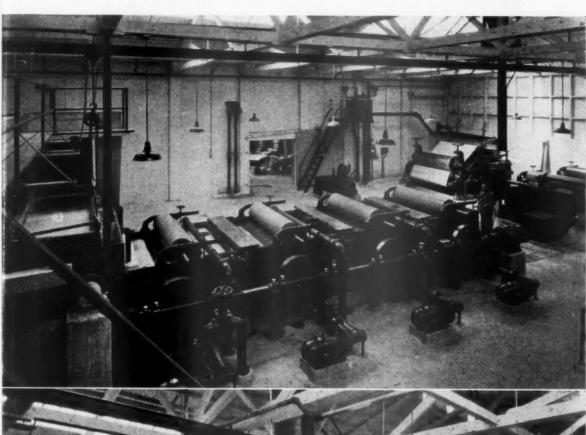
Rainier Class A stock, on which all dividend arrearages were cleared with a payment of \$1.50 per share on October 15th, has been listed on the San Francisco Stock Exchange since March 11. 1929

The Rainier Pulp & Paper Company has no funded debt, its sole capitalization consisting of 100,000 outstanding shares of Class A common no par value stock and 123,000 Class B no par value common stock.

A dividend of \$1 per share, the first since June, 1930, was recently paid on the Class B common stock.

VIEWS OF THE NEW DE-INKING PLANT

Fibreboard Products Company's Vernon Plant-Los Angeles





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SOME APPLICATIONS OF THE CHEMICAL PROPERTIES OF CELLULOSE*

By DR. ROBERT E. BROWN

For a very long time the utility of cellulosic materials depended upon the physical characteristics of natural cellu-lost fibers as they were won from the plants that produced them. The growth of industries contingent upon this organic material was largely dependent on improvements in physical form or condition of these fibers to best suit the pur-poses to which they were put. Until comparatively recent times the chemical characteristics of cellulose were to a great extent neglected, but as the chemical industries increased a new phase of cellu-lose utilization was evolved through exploitation of the chemistry of cellulose.

The result of one aspect of the chemi-cal development of cellulose has been the production of artificial fibers by several general processes. For the most part these artificial fibers have been classified under the name of rayon, which today is manufactured mainly by the viscose, acetate, and cuprammonium processes. Of these the most widely used today is the viscose process, in which a solution of cellulose is produced by a series of chemical reactions. This cellulose solution when forced through an orifice into an acid hardening or coagulating bath can be made to produce a continuous filament. In practice such a solution is forced out through extremely small round holes for the formation of rayon threads. If, instead of being forced through a round hole into the coagulating bath, this solution is forced through a narrow slit, a continuous film of cellulose appears.

The interaction between cellulose, acet-acid, and acetic anhydride will produce a substance known as cellulose acet-ate, which when converted to proper form will dissolve in certain organic reagents. From such a solution fine threads or continuous films may also be produced. In this case, however, the film or thread is composed of cellulose acetate, and not of cellulose, as is the case when similar physical forms are produced by the viscose process. In addition to production of these substances, cellulose acetate also has some uses as lacquers and varnishes, non-inflammable photographic impregnating materials, and the manufacture of non-shatterable glass.

Some of the first rayon manufactured was produced from a solution of one of the lower cellulose nitrates, which although not explosive were rather unsuitable for rayon for other reasons. The manufacture of cellulose nitrate rayon has almost cessed today, its place being taken by the viscose, acetate, and cuprammonium processes. Cellulose nitrate is still the basis for many explosives, lacquers, collodion solutions, etc. It should be noted here that cellulose nitrate can be prepared in a number of different grades with quite different physical and be used for explosives.

*A resume of the talk given by Dr. Brown at the meeting of the Pacific Coast Division of the American Pulp & Paper Mill Superintendent's Association, Seattle, December 7th, 1935. Dr. Brown is a member of the Rainier Pulp & Paper Company's staff.



DR. R. E. BROWN Explained Uses for Cellulose

chemical properties. Cellulose nitrate that is employed in the manufacture of lacquer is different from one that would

The manufacture of rayon can also be effected by the production of continuous filaments or threads from a solution of cellulose in cuprammonium hydroxide or its equivalent. This solution is spun in somewhat the same way as a viscose solu-tion of cellulose. Owing to the higher manufacturing costs of cuprammonium rayon and also of cellulose acetate rayon, these two grades are not as extensively manufactured as viscose rayon.

CANADIAN-JAPANESE TRADE WAR SETTLED

Canada lost about \$5,000,000 worth of trade during the six months in which the Japanese embargo was effective. Nominally, the trade war began in the first week of August, but heavy commitments were made in advance in anticipation of trouble so Canada did not begin to feel the loss until October. ously, Canada will not begin to benefit directly from the restoration of peaceful trading relations until early in the spring, by which time trans-Pacific business will be back to its normal flow.

Settlement of the row with Japan is regarded in Canada as second in importance only to the recently concluded re-ciprocal agreement with the United ciprocal agreement with the United States. In many respects the Japanese issue is the most controversial handled by the Canadian government since the country applied its Canada First tariff policy in 1930. The outstanding feature of the settlement is the virtual abandon-ment by Canada of currency dump duties, although this point seems to have Within two been ignored in most circles. vears, failing unforeseen changes, Japanese goods will enter Canada without

currency dump duty. British exporters will object to that, especially in the textile field, but special tariffs may be cre-

ated to protect them.
On the old gold standard the Japanese yen was worth 49 cents in Canadian currency. Soon after Britain abandoned gold Japan depreciated her currency and the yen dropped rapidly until for the last few months it has been worth about 29 cents. The Canadian government, then headed by Premier R. B. Bennett, refused accept Japanese goods on the new valuation and continued to recognize the old one, for customs purposes. The Japold one, for customs purposes. The Japanese complained and the Bennett government relented to some extent, conceding that prices of raw materials, etc., had risen in Japan. The value of the yen, for customs purposes, was dropped by Canada from 49 cents to 41.5 cents. But this didn't satisfy Japan and the trade war was on. Japan imposed a 50 percent surrax on certain Canadian goods, including lumber and pulp, and Canada struck back with a similar surrax on Japanese imports. The trade between the two countries approached a standtsill when the Canadian general election came on and the Bennett government was re-placed by the Liberal administration of Mackenzie King, strong believer in low tariffs and open markets.

In the new settlement reached by Canada with Japan, Canada will value the yen at its five-year average in Canadian money in the period 1930-34 inclusive. In other words, the valuation of the yen will be 39.5 cents instead of 41.5 cents as heretofore. Basing the valuation on the average of the last five years, it is esti-mated that next year the yen will be valued at 34 cents and in 1938 it will be 29 cents, its present market rate, unless here is a rapid rise in the value of the yen, or a corresponding depreciation in the value of the dollar in the ensuing

year.

NEW FINNISH KRAFT PULP MILL PLANNED

In the November 15th issue of the Finnish Paper & Timber Journal appeared the following story:
"We understand that Veitsiluoto Oy. is planning the erection of a large sulphate cellulose mill in Northern Finland, and that the scheme has been placed into the hands of technical experts. So far, however, no definite decision has been made in regard to the place of the pro-jected enterprise, and also in other respects the realization of the scheme is still in a provisional stage. It is intended that the projected mill should have an annual capacity of between 80,000 and 100,000 tons, and the designs will be prepared by Mr. Eero Kalaja, who has projected the new large sulphate mill at

Kaukopaa.

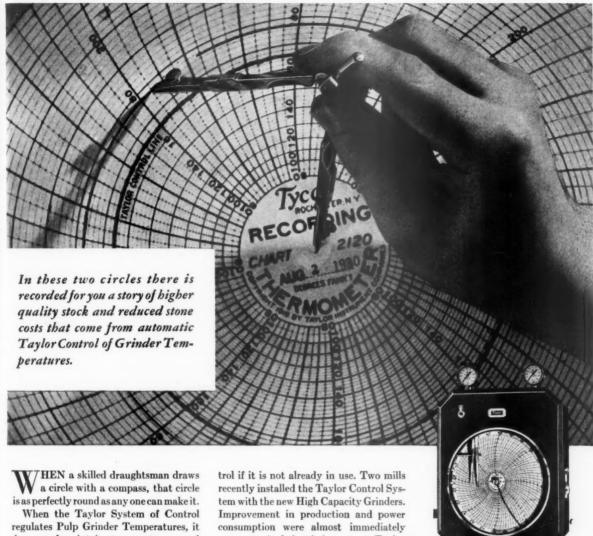
"In connection with this new important project, Mr. L. Kivinen, general manager of Veitsiluoto Oy., points out in the Press that the growing demand for sulphate as well as the large unexploited properties of raw material in the Northquantities of raw material in the North-ern districts of Finland have made the erection of a new mill in those parts desirable."

SCHOENWERK RETURNS TO COAST

Mr. O. C. Schoenwerk, pulp and paper mill engineer, who designed and is su-pervising the construction of the new Weyerhaeuser unbleached sulphtie pulp mill at Everett, Washington, returned to the Pacific Coast early in January after spending the holidays with his family in

Drawn with

THE PRECISION COMPASS..



draws and maintains temperature record on circular chart with compass-like pre-

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Before the development of this Taylor System, manual operation gave anything but precise control of grinder temperatures. Stock quality was a variable. But today it's a different story. Grinding at too high or too low temperatures for a definite grade of stock is eliminated. Stock retains the uniformity in texture, freeness, and strength required for each grade. The good effect of close temperature control is felt all the way to the driers.

Any mill modernization plan today should include Grinder Temperature Conapparent. And that is important. Taylor Control of Grinder Temperature begins to cut costs at once. This system frequently pays for itself in a year's time.

The Taylor Grinder Temperature Control can be used efficiently and economically on all types of grinders. Ask a Taylor Representative about it or write Taylor Instrument Companies, Rochester, N. Y., or Toronto, Canada. Manufacturers in Great Britain-Short & Mason, Ltd., London, England.

Taylor Instrument Companies, Terminal Sales Bldg., 1220 S. W. Morrison Street, TEMPERATURE, PRESSURE and Portland, Oregon.

Keeping grinder temperature under close control is the job of this Taylor "Fulscope" Controller, one of the finest developments in temperature instruments. After quick adjustment to meet any grind-ing condition, the "Fulscope" makes grinder temperature stay where it belongs. It also makes a chart record of daily run.



FLOW INSTRUMENTS

CROWN-WILLAMETTE'S LOS ANGELES BAG PLANT

For some years the Crown Willamette Paper Co. has maintained a converting plant in Los Angeles, making citrus fruit wraps to supply the vast citrus industry in Southern California. Several years ago the company built a new plant in a growing industrial section east of the downtown district, at 2945 East 12th Street.

The company has also done a large business in paper bags, increasing as the population grew until Southern California is now one of the most concentrated buying centers of the country. Crown Willamette operates a very large and efficient bag plant at Camas, but as the Los Angeles market grew toward present dimensions, serving it from a distant point presented difficulties.

The result was the construction of a new bag factory in Los Angeles, adjoining the citrus plant, to serve the Southern California territory. This building, 85 feet by 198 feet, was completed and the first bags turned out just a year ago.

Crown Willamette's bag business continued to mount, and before the first year of operation was out, the plant was crowded beyond expectations. So now the latest step in expansion has been taken, the construction of a new warehouse to relieve the pressure on the manufacturing quarters.

The bag factory itself is equipped with a full battery of the latest Potdevin bag machines, making all sizes from quarters to thirty-fives. Working conditions are ideal, with daying tillumination being provided by saw-tooth roof construction with the

windows facing north. The machines are operated by girls, and efficiency is maintained by working in shifts, with adequate rest periods. A 40hour work week is adhered to in the plant.

All of the paper used in the factory is made on the Pacific Coast, even to the mill wrappers in which the finished bags are cartoned.

Uniform quality of bag is assured by close attention to every small detail in every operation. The paste used on the bags is carefully prepared, and any left over and not used immediately is sent to the sewer. To make certain that no bags are imperfect because of the bag machine paste pots running low, glass jug wells holding several gallons have been fitted, assuring ample supply and constant visible indication when renewal is required.

The bags are double inspected, once when packed at the bag machine table, and a second time by an inspector who checks them on the drying racks. After allowing ample drying time, the bags are baled by pneumatic balers which give uniform compression, instead of the varying pressure often given by foot-operated machines. When a wrapped, the bags are ready for shipment or warehousing.

Before completion of the new warehouse, bag rolls were stored in the citrus warehouse or in the bag factory, and stocks of the finished bags were carried in the factory itself. Now the citrus department and the bag factory are separated completely, and the bag rolls are stored in the additional space in the plant

made available by the new storage structure.

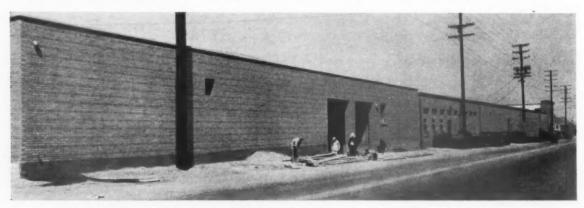
This warehouse immediately adjoins the bag plant, and is 125 feet by 198 feet in size. It is used for storage of wrapping paper and bags. An important feature is the installation of air conditioning equipment which maintains the proper degree of humidity, especially desirable for wrapping paper, which loses strength when dried out. This is particularly valuable in summer, when heat and humidity conditions make it difficult to deliver wrapping paper to buyers in proper condition.

Despite the considerable expansion that has taken place since the company built the original citrus plant, Crown Willamette still has additional property adjoining, available for further building when nec-

Wrapping paper and bag sales are in charge of Lester E. Remmers and W. R. McHaffie is in charge of the citrus division. Walter Mueller, a bag maker of 20 years' experience, is bag plant superintendent. The bag plant and warehouse have some 125 employees.

When the Crown Willamette Paper Co. came to this location it was a rather sparsely settled district. Today there is a movement of paper people toward this section, and already a number have chosen this center for their operations. There are a number of converting plants in the area making paper boxes, milk bottle caps, etc.; the Ingram Paper Co. is located close by; the U. S. Paper Co. is building a block away from the Crown Willamette plant, and there is talk of several others moving near.

It recently was proposed that this industrial district be officially named "Paper Plaza", and while this has not as yet been done, it appears that the name will soon be earned, whether conferred or not.



The new warehouse addition to Crown-Willamette Paper Company's Los Angeles bug manufacturing plant.

MARCUS ALTER'S ESSAYS SELL PAPER— PROVOKE THOUGHT

Once a month, for twelve long years, without interruption, Marcus Alter, president of the Commercial Paper Corporation, has edited and issued one of the most unique house organs of its kind in existence in the United States.

The name of the publication is "Paper-Graphs" and it describes itself on the frontispiece as, "A Corporation House Organ in which we endeavor to give a few constructive suggestions and incidentally call attention to our quality papers."

Eight pages, size 7 x 10 inches of solid ten point type make up this monthly publication of "Paper-Graphs," and except for one or two brief announcements about items of the Commercial Paper Corporation's stocks, these pages are filled with essays and dissertations on various economic and social subjects. Some of the articles published in the last few months were entitled, "True Americanism," "The Road to Abundance," "Immigration," "Liberal and Reactionary," "Forward Strides," "Unemployment," and the December issue will treat on the timely topic of "War!"

Marcus Alter writes these essays himself and does a very thorough job of research before touching his pen to paper. He writes best when he is alone—at times Saturday afternoons in the office, after all the staff have gone, or in the early morning hours at home before the family has arisen. He never writes during business hours, but steals the time from his leisure, rest and family to prepare these articles, and they are written on a high plane in readable language and in very interesting form.

More than fifteen hundred copies of "Paper-Graphs" go out every month to the Commercial Paper Corporation's customers as well as to a growing list of people who have heard of the subjects treated in this publication and have written asking to be put on the mailing list.

Many and varied are the responses Marcus Alter gets to the articles he published in this house organ. Probably the most humorous was from a Mill Valley newspaper publisher, Mr. F. J. Drexler, of the "Record," who wrote to the Commercial Paper Corporation a postal card saying, "I do not know who Marcus Alter is, but if he is a salesman of yours he is entitled to a promotion on the excellence of his recent article under the heading, 'Liberal and Reactionary'." Unfortunately Mr. Alter could get no further promotion, but probably received an order for some paper from the "Mill Valley Record."

Roy Harden of San Jose, editor of "Modern Knighthood," wrote in to say that the "Order of the Round Table"



uses "Paper-Graphs" in its study hour. And the national magazine, "Printer's Ink," listed "Paper-Graphs" on a master list of house organs from which were missing a number of other organs issued by competing paper houses.

E. B. Dietrich of Mt. Holyoke College, South Hadley, Mass., writes as follows: "The last copy of "Paper-Graphs" is interesting and the article bears witness of someone trying to think his way through the present mess creatively. I am asking Mr. Arnold Tolles who gives the course in Money and Banking to write to Mr. Alter as he is particularly interested in this field."

The Technocratic League of San Francisco wrote among other things: "If some outstanding business men took your intelligent interest in the workings of our social system we would not now be experiencing the present deplorable conditions."

James W. Erwin of San Francisco wrote: "I have just been reading your article, 'Hold On' in the current number of 'Paper-Graphs' and cannot refrain from expressing to you my great appreciation of the sentiments so splendidly set forth therein. Thank you so much for writing the article and for the great pleasure I have had in reading it."

Charles Francis Potter, founder and leader of the First Humanist Society of New York, writes as follows: "I enjoyed the articles in 'Paper-Graphs' entitled 'The Land of Opportunity' and 'Crime.' I consider you one of the liberal preachers of the country. You certainly have

the gift of compressing an entire address in a few paragraphs."

The American Writing Paper Company of Holyoke, Mass., writes as follows: "The article 'Nature Points the Way' shows keen appreciation of the conditions as they exist today and a progressive, comprehending view of the future. I have read it with considerable interest. I appreciate your sympathetic and broad-minded viewpoint."

R. S. Crump, president of the Standard Paper Company of Richmond, Virginia, wrote in commenting on one of Mr. Alter's articles on "Wealth" and said he liked the idea of getting "wealth" fine but he'd like to have more details so he could accumulate some. And then Mr. Crump added a postscript, "Please send me an order for some paper," indicating he was on the right track to "wealth."

Mr. Alter was invited to talk before the Immigration Section of the Commonwealth Club and the New Economic Group, both of San Francisco. He states that "Paper-Graphs" gets him on the exchange lists of some of the leading house organs as well as on many regular publications throughout the United States

Mr. Alter's perseverance at this task of writing is an excellent example for any writer to pursue. Up at five in the morning at times writing his essays—and it is cold at five some of these winter mornings in San Francisco—but he likes the work and doesn't mind it.

L. A. PAPER MEN MEET

Twenty-six members of the Paper Mill Men's Club met at the Terminal Club, Los Angeles, on Dec. 19 for the last semi-monthly noon business meeting of the year.

The first order of business was provided by Dewey Megel, who moved the impeachment of the president, Frank Philbrook, on various and sundry charges, the most important of which was that President Philbrook was behind on his social obligations, particularly to Mr. Megel. Proceedings were promptly stopped and forgotten when Mr. Philbrook bought a Christmas drink for the entire assembly.

An informal discussion of current business matters, including discussion of the current shipping situation which has hindered paper shipments to some extent, concluded the meeting.

The next gathering will be late in January, in the evening. The December luncheon was arranged by Harry Fields, chairman, Kenneth R. Ross and Warren E. Brooks.

T.R.A.D.E • T.A.L.K

of those who sell paper in the western states

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COUCH RETIRES—HUELAT MANAGER B. M. & T. LOS ANGELES DIVISION

The retirement of F. M. Couch as manager of the Los Angeles division of Blake, Moffitt & Towne has just been announced by the headquarters of this pioneer firm of paper merchants. Coupled with this announcement comes the news that Walter W. Huelat, manager of the printing paper department at Los Angeles, has been named to succeed him. These changes became effective December 31.

Mr. Couch explained that his action was prompted by the desire to enjoy a larger measure of leisure and to be relieved of the burdens and responsibilities of the management of this large and important division in the company's chain of houses.

At a meeting of the directors called to consider the matter, Mr. Couch's resignation was accepted with regret and his long and loyal service to the company was the subject of a formal expression of appreciation and gratitude. The Los Angeles division honored Mr. Couch at a luncheon the end of December, at which time he was presented with a token in recognition of his work and accomplishment by J. K. Moffitt, president of Blake, Moffitt & Towne.

Walter W. Huelat, whom the directors have appointed manager, has been connected with the company for a period of 25 years, having entered the employ of the Portland house as a lad of 19. Prior to this he spent over a year in a printing plant, which served as a valuable background for the paper selling activities to which he has since devoted his time. His progress in the paper business in Portland was sound and steady and led to his appointment as manager of the printing paper department of that organization.

It was to fill a similar position that he was called to the Los Angeles house a few years ago where he has continued to demonstrates his ability in handling the merchandising problems confronting the paper trade. Always a leader in sound trade association activities, he has devoted much time and effort toward the maintenance of fair trade practices and coperation with the printing and allied industries. In the comparatively short time he has been in Los Angeles, Mr. Huelat has become highly regarded throughout the trade in southern California and Ariona and his many friends are receiving the news of his appointment most favorably.

He is a believer in "keeping fit" for the strenuous demands of business life and consistently devotes time to regular exercise, such as golf, rowing, swimming or handball. His own vigorous health may in part account for his cheerful outlook on the future as reflected by the following comments in answer to a request as to his views:



WALTER HUELAT

"I am most optimistic as to what the future holds for the paper merchant and the industry generally in the southern California market. In my opinion this section of the country is bound to experience a strong and steady growth and development and the paper business, which is well organized and prepared, will be in a favorable position. Speaking for Blake, Moffitt & Towne, we feel our opportunities are particularly promising. Our complete inventories and our modern plant with adequate warehousing, rereiving and shipping facilities are comparable with any in the west. In addition, and which is most important, we have a loyal and intelligent staff of coworkers."

Mr. Huelat went on to say that no further changes were contemplated in the personnel of the Los Angeles division. The wrapping paper department will continue under the direction of R. R. Whiteman, while the printing paper department will continue with T. M. Denison, in charge of sales and R. K. Erlandson, in charge of purchases.

U. S. PAPER IMPORTS ADVANCE

United States paper import trade has increased during the current year, figures compiled in the Department of Commerce indicate.

During the first ten months of 1935 aggregate imports were valued at \$74,-904,410 compared with \$70,585,098 in the corresponding period of last year. Newsprint receipts amounted to 1,899,136 tons, valued at \$65,691,577, in the 1935 period compared with 1,792,410 tons, valued at \$61,943,536, in 1934. Imports of "other" paper in the January-October

period of the current year were valued at \$11,212,834 compared with \$8,641,562 in the similar period of 1934, statistics show.

Imports into the United States of paper base stocks in the first ten months of 1935 were valued at \$65,022,223 compared with \$58,970,099 in the 1934 period. Woodpulp accounted for \$55,214,706 in the 1935 period compared with \$50,627,386 in the first ten months of last year, while pulpwood totaled \$7,007,214 in the period under review compared with \$6,587,449 in 1934, according to the Commerce Department.

FRENCH ENTERTAINS EMPLOYEES

The Fred H. French Paper Co. gave a party for their employees during the holidays in keeping with the Christmas spirit and in appreciation of the loyalty of the staff during 1935.

The company recently purchased the building at 828 Traction Ave., Los Angeles, which formerly they had been leasing.

ZELLERBACH IN NEW BUILDING

The Los Angeles division of the Zellerbach Paper Co. moved into their fine new quarters at 3000 East 12th St. over New Year's day, and was ready for business Jan. 2.

No formal opening celebration was held, but the company invited its customers, mill men and other friends to inspect the plant at any time in the two weeks following Jan. 6.

An annual sales meeting was held on the opening day, with a number of the San Francisco executives present.

During January the General Paper Co. was preparing to move to the previous Zellerbach location at Second and Los Angeles streets.

BORCHERS OF OXFORD

Frank Borchers, new representative of the Oxford Paper Co., was in Los Angeles the first week of the year visiting Blake, Moffitt & Towne while on his annual coast trip.

KELLY PAPER COMPANY OPENS

J. Arthur Kelly, formerly with the General Paper Co., opened the Kelly Paper Co. at the first of the year in quarters at 1136 So. Los Angeles St., Los Angeles. His lines include the Valley Paper Co. and the Parker-Young Co., manufacturers of "Franconia" bond, a nationally advertised brand.

Mr. Kelly is operating his jobbing business along a different principle than usual, placing a base price on cash and carry business and placing extra charges for special services such as credit, delivery, etc. BAILEY ON COAST

Edward Bailey of Hollingsworth & Whitney, New York state manufacturers of wrapping and fine papers, reached Los Angeles Jan. 6, spending a week here visiting the various jobbers.

ABRAMS TRAVELS

Sam Abrams of the U. S. Paper Co., who spent about six weeks traveling in the East contacting his mill connections, returned to Los Angeles the week of Jan. 6.

O'KEEFE

Tom O'Keefe, benedict, got back to Los Angeles from his wedding in Detroit, and is again busily commuting between the Sierra Paper Co. plant and his offices in San Francisco.

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PROSPECTS FOR 1936

The approach of a new year invariably calls for a review of the past and a consideration of the prospects of the future. This usual practice takes on an added significance when progress in the immediate past can be reported and when the prospects in the future appear bright. Statistics and opinion agree that substantial progress in the paper industry was made in 1935 and it is the consensus of opinion of the industry's leaders that the prospects for 1936 appear good, according to the American Paper & Pulp Association.

The paper and pulp industry has been slow in recovery. The spurt of production in 1933, coincident with the enactment of the N. I. R. A., lifted the records for that year above the disastrous record of 1932. But better business was but temporary. Production declined in 1934 to low levels, particularly in July and August. From then on, however, a gradual quickening in activity took place, which carried over the year-end, showing little influence from the usual seasonal factors, and even on through the summer months, when normally sales of paper decline. Production lifted even higher in the last half of 1935, bringing the level of the industry over the year to a fairly satisfactory record.

Preliminary estimates, based upon ten months' report, indicate that the paper industry as a whole produced in 1935 approximately 10,375,000 tons of paper and paperboard. This figure represents a substantial advance over the 1934 record which was reported by the Bureau of Census at 9,140,000 tons.

During the latter part of 1935 the production of coarse paper grades responded to the greater volume of retail sales and in some grades new production levels were established. The fine paper grades do not normally respond quite so rapidly, but significant increases in sales volume took place in most instances.

The volume of paper production is closely coordinated with general business conditions. There may be some lag in the response of the paper industry to the up and down movements in industry as a whole, but over relatively long periods the coordination is close. The prospects for 1936, therefore, with practically all business advisors prophesying continued increase in the index of productivity, indicates a good year for the paper industry. This is particularly true because the volume of production in 1935 went largely into immediate consumption; there was little tendency on the part of merchants and converters to increase stocks. As a matter of fact, in most grades stocks at the year end are at their normally low

point. These indications are unusually significant; so much so in fact that some believe production in 1936 will approach if not equal the record of 1929.

Price movements in 1935 have fluctuated through narrow ranges. Average mill realizations show little change with comparable figures for 1934. As production has increased, prices have tended to become firmer, which may well indicate a general upward movement in prices as the expected volume increases take place.

Price strengthening is justified by cost increases. Price levels have changed but little in most grades since the summer of 1933, which was before the adoption of the industry's code of fair competition. Throughout the intervening period costs of materials and of labor have increased steadily. These increases were not offset by price increases; but in 1935 their retarding effect upon profits was somewhat lessened as volume of sales grew and unit overhead costs declined. It is clear, however, that the industry as a whole has not yet attained a position of normal profit and that if costs remain at their present levels price increases, when justified by greater volume of production, are necessary for most manufacturers if they are to maintain their financial resources and their production facilities.

PEN TAYLOR TO HONOLULU

Pen Taylor, salesman for the Pacific Coast Paper Company in the Vallejo, California, territory, left on December 18th for Honolulu to make his home.

Mr. Taylor will becomes sales manager for the Honolulu Paper Company, with which his two brothers, Stanley and James, are already associated.

Their father, the late James I. Taylor, was the builder of the first paper mill in California.

1 Not yet effective.



PAUL ANDERSON FORM ZELLERBACH RECREATION CLUB

Zellerbach Recreation Club was formed recently in San Francisco by employes of the Zellerbach Paper Co. headquarters and northern California divisions and gave its first dance at the St. Francis Yacht Club early in November. President is Paul Anderson, credit manager of the San Francisco division; vice president is Johnnie Dockwell, salesman; secretary is Ruth Prentiss and treasurer is Florence Campbell. There are 210 members.

ANNOUNCEMENTS UNDER TRADE RECIPROCITY ACT

Tra	ade Agreements Conclude	d				
Country—		Date signed		Date eff	ectiv	e
Cuba	Aug.	24.	1934	Sept. 3	, 19	34
Brazil	Feb.	2,	1935	Jan. 1	, 19	36
Belgium	Feb.	27.	1935	May 1	, 19	35
Haiti	March	25,	1935	June 3	, 19	35
Sweden	May	25,	1935	Aug. 5	. 19	35
Colombia	Sept.	13.	1935	(1)	
Canada	Nov.	15,	1935	Jan. 1	. 19	36
Honduras	Dec.	18.	1935	(1)	
Kingdom of the Netherlands	(Netherlands in	-,				
Europe, Netherland Indies, S		20,	1935	Feb. 1	, 19	36

COUNTRIES WITH WHICH INTENTION TO NEGOTIATE HAS BEEN ANNOUNCED

Country—	anı	ate nour men	ice-	heari by co for re info	cipro	held ittee ocity
Costa Rica	Sept.	7.	1934	Oct.	15,	1934
El Salvador	Sept.	7.	1934	Oct.	15,	1934
Guatemala	Sept.	7.	1934	Oct.	15,	1934
	Sept.	7.	1934	Oct.	15.	1934
Spain	Sept.	17.	1934	Nov.	12,	1934
Switzerland	Oct.	23,	1934	Dec.	17,	1934
Finland	Dec.	19,	1934	Feb.	11.	1935
Italy	Jan.	16.	1935	March	11.	1935
France and its colonies, dependencies and pro- tectorates other than Morocco	April	30.	1935	Tune	24.	1935

Tables showing the principal commodities entering into the trade between the United States and each of the above countries with whom negotiations are being entered into, prepared by the Department of Commerce, were made public by the Department of State at the time of he above announcements. Detailed statements of the trade of the United States with each of the above countries, both import and export, are available at the Division of Foreign Trade Statistics, Department of Commerce, Washington, D. C., and all the district offices of the Department of Commerce.—From Commerce Reports, December 28, 1935.



Ever Figure This One Out?

Have you ever figured out what a slight extra reduction of the moisture content of a sheet of paper on the wet end means in reduced steam costs on the dryer end?

Try it some time. You will be amazed for just this one seemingly unimportant economy will, in the average mill, run into thousands of dollars per year.

That is why it is important to clothe your machine with the right felts-the kind that will most rapidly and most thoroughly take out the water-Orr Felts.

All required lengths, trims and textures. Have an Orr representative help you specify.

Pacific Coast Representative: WALTER S. HODGES 414 Terminal Sales Bldg., Portland, Oregon

The Orr Felt and Blanket Company

PIQUA, OHIO

GERMAN RAYON PRODUCTION INCREASING

Germany ranked fifth in importance among rayon-producing countries during the first 9 months of 1935, according to pre-liminary trade estimates. Production of rayon and other synthetic textile spinning fibers has assumed increasing importance as restrictions on imports of raw materials, which became inas restrictions on imports of raw materials, which became increasingly more severe since early 1934, have made it necessary for textile manufacturers to seek domestic substitutes for imported textile fibers. The German rayon output increased from 71,600,000 pounds in the first 9 months of 1934 to 81,000,000 in January-September 1935, and production of other synthetic textile fibers (mainly staple fiber or cut rayon) rose from 14,000,000 to 22,000,000 pounds. Germany is the world's leading producer of staple fiber, with Italy a close second.

Germany has usually imported considerably more rayon than

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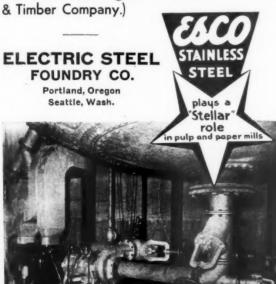
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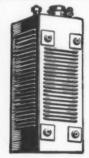
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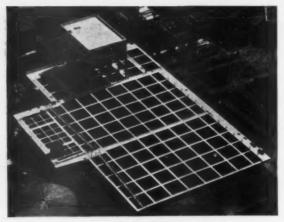
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of those who sell paper in the western states

COUCH RETIRES—HUELAT MANAGER B. M. & T. LOS ANGELES DIVISION

The retirement of F. M. Couch a manager of the Los Angeles division of Blake, Moffitt & Towne has just been announced by the headquarters of this pioneer firm of paper merchants. Coupled with this announcement comes the news that Walter W. Huelat, manager of the printing paper department at Los Angeles, has been named to succeed him. These changes became effective December 31.

Mr. Couch explained that his action was prompted by the desire to enjoy a larger measure of leisure and to be relieved of the burdens and responsibilities of the management of this large and important division in the company's chain of houses.

At a meeting of the directors called to consider the matter, Mr. Couch's resig-nation was accepted with regret and his long and loyal service to the company was the subject of a formal expression of appreciation and gratitude. The Los Angeles division honored Mr. Couch at a luncheon the end of December, at which time he was presented with a token in recognition of his work and accomplishment by J. K. Moffitt, president of Blake, Moffitt & Towne.

Walter W. Huelat, whom the directors have appointed manager, has been connected with the company for a period of 25 years, having entered the employ of the Portland house as a lad of 19. Prior to this he spent over a year in a printing plant, which served as a valuable background for the paper selling activities to which he has since devoted his time. His progress in the paper business in Portland was sound and steady and led to his appointment as manager of the printing paper department of that organization.

It was to fill a similar position that he was called to the Los Angeles house a few years ago where he has continued to demonstrates his ability in handling the merchandising problems confronting the paper trade. Always a leader in sound trade association activities, he has devoted much time and effort toward the maintenance of fair trade practices and cooperation with the printing and allied industries. In the comparatively short time he has been in Los Angeles, Mr. Huelat has become highly regarded throughout the trade in southern California and Ariona and his many friends are receiving the news of his appointment most favorably.

He is a believer in "keeping fit" for the strenuous demands of business life and consistently devotes time to regular exercise, such as golf, rowing, swimming or handball. His own vigorous health may in part account for his cheerful outlook on the future as reflected by the following comments in answer to a request as to his views:



WALTER HUELAT

"I am most optimistic as to what the future holds for the paper merchant and the industry generally in the southern California market. In my opinion this section of the country is bound to experience a strong and steady growth and development and the paper business, which is well organized and prepared, will be in a favorable position. Speaking for Blake, Mossitt & Towne, we feel our opportunities are particularly promising. Our complete inventories and our modern plant with adequate warehousing, rereiving and shipping facilities are com-parable with any in the west. In ad-dition, and which is most important, we have a loyal and intelligent staff of coworkers

Mr. Huelat went on to say that no further changes were contemplated in the personnel of the Los Angeles division. The wrapping paper department will continue under the direction of R. R. Whiteman, while the printing paper department will continue with T. M. Denison, in charge of sales and R. K. Erlandson, in charge of purchases.

U. S. PAPER IMPORTS ADVANCE

United States paper import trade has increased during the current year, figures compiled in the Department of Commerce indicate.

During the first ten months of 1935 aggregate imports were valued at \$74,-904,410 compared with \$70,585,098 in the corresponding period of last year. Newsprint receipts amounted to 1,899,136 tons, valued at \$65,691,577, in the 1935 period compared with 1,792,410 tons, valued at \$61,943,536, in 1934. Imports of "other" paper in the January October paper in the January-October

period of the current year were valued at \$11,212,834 compared with \$8,641,562 in the similar period of 1934, statistics

Imports into the United States of paper base stocks in the first ten months of 1935 were valued at \$65,022,223 compared with \$58,970,099 in the 1934 period. Woodpulp accounted for \$55,214,706 in the 1935 period compared with \$50,-627,386 in the first ten months of last year, while pulpwood totaled \$7,007,214 in the period under review compared with \$6,587,449 in 1934, according to the Commerce Department.

FRENCH ENTERTAINS EMPLOYEES

The Fred H. French Paper Co. gave a party for their employees during the holidays in keeping with the Christmas spirit and in appreciation of the loyalty of the staff during 1935.

The company recently purchased the building at 828 Traction Ave., Los An-geles, which formerly they had been leas-

ZELLERBACH IN NEW BUILDING

The Los Angeles division of the Zellerbach Paper Co. moved into their fine new quarters at 3000 East 12th St. over New Year's day, and was ready for business Jan. 2.

No formal opening celebration was held, but the company invited its cus-tomers, mill men and other friends to inspect the plant at any time in the two weeks following Jan. 6.

An annual sales meeting was held on the opening day, with a number of the San Francisco executives present.

During January the General Paper Co. was preparing to move to the previous Zellerbach location at Second and Los Angeles streets.

BORCHERS OF OXFORD

Frank Borchers, new representative of the Oxford Paper Co., was in Los An-geles the first week of the year visiting Blake, Moshitt & Towne while on his annual coast trip.

KELLY PAPER COMPANY OPENS

J. Arthur Kelly, formerly with the General Paper Co., opened the Kelly Paper Co. at the first of the year in quarters at 1136 So. Los Angeles St., Los Angeles. His lines include the Valley Paper Co. and the Parker-Young Co., manufacturers of "Franconia" bond, a nationally advertised brand.

Mr. Kelly is operating his jobbing business along a different principle than usual, placing a base price on cash and carry business and placing extra charges for special services such as credit, delivery, etc.



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